

came from Chetopa, Kansas (D. R. Beardslee) and expand 120 millimeters. This is supposed to be not a great many miles from the type locality. *Cicada marginata* has sometimes a line of pruinose spots on the tergum, but generally these spots are inconspicuous or have been entirely obliterated by age. In specimens of the same size the eyes are much further apart in *marginata* than they are in the allied *Cicada dealbata* described in this JOURNAL for September, 1915.

EXPLANATION OF PLATE XVIII.

- Fig. 1. *Cicada cultriformis* Davis, reduced.
 Fig. 2. *Cicada marginata* Say, reduced.
 Fig. 3. *Cicada cultriformis*; genitalia, enlarged.
 Fig. 4. *Cicada marginata*; genitalia, enlarged.

TWO NEW SPECIES OF ARRHENOPHAGUS WITH REMARKS.

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The genotype of this genus heretofore has been supposed cosmopolitan. It has been recorded from many parts of the earth, including Asia and Australia. But in Australia there are two distinct species, one described, which belong to *Arrhenophagoidea* a genus which differs from *Arrhenophagus* in bearing **5-jointed tarsi** only. All other specimens which I have seen from that region are the genotype of this second genus. Ceylonese and Japanese specimens of *Arrhenophagus* represent the two species below but North American specimens appear to be *chionaspidis*. The club is **solid** (in spite of all statements to the contrary).

1. *Arrhenophagus albitibiæ* new species.

Female.—Length 0.40 mm.

Like the genotype but all tibiae and tarsi are white, the antennæ are yellowish white. The venation is pale at tip, not ending in a small dusky spot.

Described from four females on a slide in the U. S. N. M., labelled "*Arrhenophagus chionaspidis*. 1418. *Fiorina saproscema* Green. From male scales. Handy, Ceylon, Koebele."

Types—Catalogue No. 19882, U. S. N. M., the above specimens on a slide.

2. *Arrhenophagus albipes* new species.

Female.—Length 0.40 mm.

Differs from the preceding in that all of each leg is white and the venation terminates in a small, fuscous area. Face yellowish.

Described from four females labelled as previously and "1389. *Chionaspis eugeniae* Mask. On female scales. Hong Kong, China, Koebele."

Types—Catalogue No. 19883, U. S. N. M., the above specimens on a slide.

A second slide bearing many specimens labelled "Parasite of orange scurvy scale from Kiomachi, Gifu. Japan (Nawa), January 30, 1899." And another one labelled "1407. *Diaspis brasiliensis*. On fern, Jamsui. A. Koebele."

ON DIFFERENTIAL INCIDENCE OF THE BEETLE BRUCHUS.

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INTRODUCTORY REMARKS.

Beetles of the genus *Bruchus* subsisting upon the seeds of *Phaseolus*, *Pisum*, *Vigna*, *Vicia* and other cultivated legumes may deposit their eggs upon the young pods through which the newly hatched larvæ penetrate to the developing seed or upon the matured seed itself. *B. obtectus*, the common pest of the bean *Phaseolus vulgaris* may develop in either manner. The purpose of this note is to consider the question whether when the eggs are laid on the young pods the frequency of parasitization is in any degree determined by the characters of the pod.

The assembling of the data here presented was begun in an effort to explain certain anomalous results obtained in physiological studies of seed weight in garden beans. Since these purely botanical ques-